

Title (en)  
INTEGRATED CIRCUIT WITH CHANNEL ESTIMATION MODULE AND METHOD THEREFOR

Title (de)  
INTEGRIERTE SCHALTUNG MIT KANALSCHÄTZUNGSMODUL UND VERFAHREN DAFÜR

Title (fr)  
CIRCUIT INTÉGRÉ AVEC MODULE D'ESTIMATION DE CANAL ET PROCÉDÉ LIÉ

Publication  
**EP 2449740 B1 20230301 (EN)**

Application  
**EP 09846747 A 20090629**

Priority  
IB 2009053233 W 20090629

Abstract (en)  
[origin: WO2011001226A1] An integrated circuit (505) comprises channel estimation module (560) for generating at least one channel estimation signal (570) based on at least one of a plurality of pilot signals within concurrent resource elements. The channel estimation module (560) comprising extension module (810) arranged to receive a demodulation reference signal (805) comprises the plurality of pilot signals and to add an extension to the demodulation reference signal (805), inverse discrete Fourier transform (IDFT) module (820) arranged to perform an inverse discrete Fourier transform function on the extended demodulation reference signal to generate a time domain reference signal (830), reference signal separation module (840) arranged to separate out at least one pilot signal component (850) from the time domain reference signal (830). The channel estimation module further comprises and discrete Fourier transform (DFT) module (880) arranged to perform a discrete Fourier transform function on the at least one pilot signal component (850) to generate at least one extended channel estimation signal (890).

IPC 8 full level  
**H04B 7/26** (2006.01); **H04J 11/00** (2006.01); **H04L 27/26** (2006.01)

CPC (source: EP US)  
**H04L 25/022** (2013.01 - EP US); **H04L 5/0051** (2013.01 - EP US)

Citation (examination)  
US 2008031375 A1 20080207 - ZHOU LIANG [JP], et al

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2011001226 A1 20110106**; CN 102449970 A 20120509; CN 102449970 B 20150617; EP 2449740 A1 20120509; EP 2449740 A4 20160622;  
EP 2449740 B1 20230301; US 2012087428 A1 20120412; US 8699595 B2 20140415

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